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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,301	07/22/2003	Stephen T. Staphanos	R22.12-0033	7797

27367 7590 09/28/2005

WESTMAN CHAMPLIN & KELLY, P.A.  
SUITE 1400 - INTERNATIONAL CENTRE  
900 SECOND AVENUE SOUTH  
MINNEAPOLIS, MN 55402-3319

EXAMINER
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FRANK, RODNEY T

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/624,301	<b>Applicant(s)</b> STAPHANOS ET AL. 	
	<b>Examiner</b> Rodney T. Frank	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/04, 8/04, 2/05</u>  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leyden et AL: "Real-Time Analysis of NO<sub>x</sub> Emissions Using Expert Systems", ADV INSTRUM CONTROL INT CONF EXHIB, vol. 48, no. 2, 1993, pages 1443-1453, XP002234988; hereinafter referred to as Leyden. Leyden discloses many electric power generating stations have installed continuous emission monitoring systems (CEMS) to monitor and validate compliance of their stations for the reduction of stack emissions. In addition regulatory agencies have been mandated to verify utility emissions compliance for federal and state air quality standards. To accurately enforce emission standards, an expert system has been developed which analyzes the oxides of nitrogen (NO<sub>x</sub>) emission data in real-time (Please see the abstract).
3. With regard to claim 6, Leyden discloses on page 1450 of the reference the Continuous Emission Monitoring System/Remote Terminal Unit (CEMS/RTU) the CEMS is disclosed to function to acquire data from various sensing devices and the RTU is used to collect data, perform calculations, and transmit formatted data information to the Central Station. Data transmitted to the Central Station included NO<sub>x</sub> emissions, power

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generation, fuel usage, stack gas, flow, and equipment status. With this section of the reference in mind, Leyden would disclose a distributed control and monitoring system comprising: an emission monitoring system (CEMS) coupleable to a fossil fuel engine and an electric generator, the emission monitoring system for acquiring qualitative emission data relative to the fossil fuel engine (i.e. NO<sub>x</sub> emissions, fuel usage, and stack gas flow); and a remote access node coupled to the emission monitoring system through a computer network, the node allowing remote access to the fossil fuel engine emission data and the generator output (see the communications disclosure which discloses the use of a remote access and the abstract that discloses the use of real time WAN communication).

In regard to claim 7, a remote monitoring and control node is not disclosed in exact terms, but this node would have to exist in order for the monitoring system to work as disclosed, and therefore this limitation is deemed obvious.

In regard to claim 8, page 1450 discloses that the system detects alarm/alert conditions.

In regard to claims 9-12, Leyden discloses that his smart remote monitoring system and method can detect various conditions and parameters from various devices and communicate these conditions, and parameters to remote users, which would meet the limitations of the claims.

In regard to claim 13, page 1450 discloses that a CEMS and a RTU are installed at each boiler, thus the system can be incorporated with numerous generator arrangements to provide emission information.

***Response to Arguments***

4. Applicant's arguments with respect to claims 6-13 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9-5:30 p.m. EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RTF  
September 16, 2005

  
HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800